

WG2 DR Evaluation: Phase 1 Report & Market Survey

Presented by:

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Introduction to In-Scope WG2 DR Programs

- New price-responsive DR programs for >200 kW CA IOU market
- Programs being evaluated - Critical Peak Pricing (CPP), Demand Bidding Program (DBP)
 - CPP is a rate which provides increased prices during critical peak periods and reduced prices during non-critical peak periods
 - DBP is a program that provides opportunities for customers to promise load shifting during critical periods for a “bid” incentive
- *Transitional Incentives* - Bill Protection Plan and Technical Assistance
- Other related programs:
 - CA Power Authority’s Demand Reserves Partnership
 - Utility Interruptible/Reliability programs
 - CA Energy Commission’s Enhanced Automation (information)

Overall Evaluation Objectives

- Phase I (April) Report:
 - Summarize and assess initial marketing efforts
 - Develop preliminary assessment of end user awareness, participation, decision making, perceptions, obstacles, and issues
 - Provide findings and recommendations to Working Group 2 to support March 31 filings
 - Identify key issues and questions for next phase of research
- Phase II 2004 Reports
 - Impact, Process, Market evaluation
 - Stage products coincided with regulatory-driven 2005 program design process

Activities for Phase I Report

- Evaluation commenced 1/1/04
- Limited time prior to 3/31/04 Utility filings
- WG2 Eval Committee focused Phase I evaluation effort on:
 - Utility staff interviews (12)
 - In-depth interviews with end users (~60)
 - Collection and analysis of population and participant data
 - Incorporating feedback collected by customer representatives
 - Planning for quantitative end user survey directly following Phase I report (500 interviews)
 - Summary of draft report presented to WG2 March 15, 2004
 - Phase I Report filed April 13, 2004

Quantitative Survey

- Eligible pop only (e.g., non-DA), 500 decision-maker surveys, energy and premise weights, incorporates multi-site control, fielded March 2004

Industry	All			Small (100/200-500 kW) *			Medium (500-1000 kW)			Large (1000-2000 kW)			Extra Large (2000+ kW)		
	PG&E	SCE	SDG&E	PG&E	SCE	SDG&E	PG&E	SCE	SDG&E	PG&E	SCE	SDG&E	PG&E	SCE	SDG&E
Office	30	21	8	7	2	2	4	9	2	11	10	2	8	0	2
Retail/Grocery	26	33	7	7	8	2	6	5	2	7	9	2	6	11	1
Institutional	30	24	9	7	5	2	6	8	1	3	6	2	14	5	4
Other Commercial	24	30	5	7	8	2	6	9	1	7	6	2	4	7	0
Transportation, Communication, Utility	26	26	2	6	7	2	6	9	0	6	4	0	8	6	0
Petroleum, Plastic, Rubber and Chemicals	24	28	5	5	5	2	8	9	1	7	9	2	4	5	0
Mining, Metals, Stone, Glass, Concrete	29	21	4	7	2	2	4	9	1	9	8	1	9	2	0
Electronic, Machinery, and Fabricated Metals	19	25	7	7	8	1	2	5	3	5	7	1	5	5	2
Other Industrial and Agriculture	18	16	3	6	6	1	4	5	2	5	2	0	3	3	0
Total	226	224	50	59	51	16	46	68	13	60	61	12	61	44	9

The Population at Hand

3 IOUs	Accounts in Frame	Accounts in Frame MW Sum**	Eligible Accounts	Eligible Accounts MW Sum**	Eligible Account GWh Sum
Size					
Very Small (100-200 kW) - SDG&E Only	2,406	344	2,076	297	897
Small (200-500 kW)	13,684	4,420	11,426	3,666	12,337
Medium (500-1000 kW)	4,790	3,302	3,957	2,733	9,756
Large (1000-2000 kW)	1,818	2,486	1,460	1,991	7,320
Extra Large (2000+ kW)	1,299	7,626	960	5,334	13,380
Business Type					
Commercial and TCU					
Office	3,609	2,328	3,308	2,120	6,192
Retail/Grocery	4,034	1,729	2,220	964	3,966
Institutional	4,253	2,868	3,703	2,040	6,254
Other Commercial	3,288	1,982	2,810	1,707	6,367
Transportation/Communication/Utility	1,901	1,524	1,601	1,209	2,762
Industrial and Agricultural					
Petroleum, Plastic, Rubber and Chemicals	907	1,350	805	1,108	3,411
Mining, Metals, Stone, Glass, Concrete	725	1,177	646	716	2,891
Electronic, Machinery, Fabricated Metals	1,886	1,767	1,638	1,160	4,269
Other Industrial and Agriculture	2,773	2,548	2,552	2,109	6,923
Unclassified					
Unknown	622	903	596	887	655
Totals	23,997	18,177	19,879	14,021	43,690

* Excluding Direct Access Accounts

**Diversified customer peak demand

DR 2003/2004 Marketing Timeline

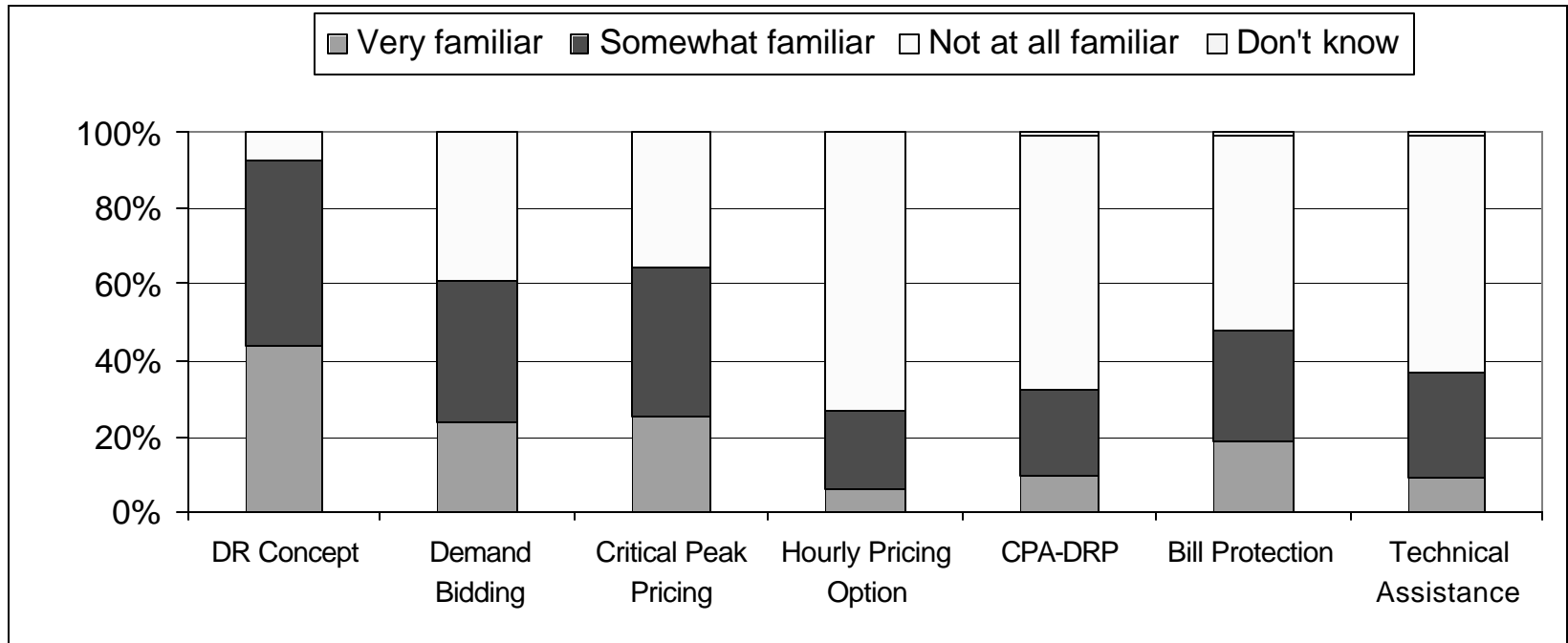
		Feb.	Mar.	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	January
	Rate History	<div> <div></div> <div>SDG&E CPP, DBP Rates filed 7/11, in effect 8/8</div> <div>PG&E CPP and DBP Rates Approved 8/1/03</div> <div>SCE CPP and DBP Rates Approved 9/5/03</div> <div>Statewide collateral available</div> <div>Revised SCE CPP Rate Approved 12/24/03</div> </div>											
PG&E	Marketing Activities	<div> <div>Initial training with 260 AEs</div> <div>Text-based fact sheet developed</div> <div>Internal "glossy" collateral developed</div> <div>Full-scale assigned customer marketing</div> <div>Initial assigned customer contacts</div> <div>Emeter marketing to unassigned accounts</div> </div>											
	No. of Accts.												
	DBP CPP	<div> <div>1</div> <div>5</div> <div>7</div> <div>8</div> <div>8</div> <div>20</div> </div>											
SCE	Marketing Activities	<div> <div>Product rollout for reps at CTAC</div> <div>Product rollout for customers at CTAC</div> <div>Statewide and SCE packets sent out</div> <div>DBP website training sessions</div> <div>Newsletter</div> <div>Newsletter</div> <div>Newsletter</div> <div>Newsletter</div> <div>DR discussed in California Electricity Marketplace Updates</div> <div>Internal training for reps</div> <div>Internal collateral developed, used in customer presentations</div> <div>Full-scale marketing</div> </div>											
	No. of Accts.												
	DBP CPP	<div> <div>9</div> <div>39</div> <div>131</div> <div>384</div> <div>393</div> </div>											
SDG&E	Marketing Activities	<div> <div>Initial one-on-one meetings with customers</div> <div>Internal workshops preparing customers for DR programs</div> <div>Internal collateral done</div> <div>Full scale marketing kickoff</div> </div>											
	No. of Accts.												
	DBP CPP HPO	<div> <div>5</div> <div>10</div> <div>0</div> </div>											

Utility CPP/DBP Marketing Efforts

- SCE and PG&E marketed aggressively since late summer last year; SDG&E began active marketing early in 2004
 - One-on-one meetings between reps and customers
 - Use of consistent Statewide and utility-specific collateral
 - All utilities conducted in-house rate analyses for CPP
 - Utilities required to focus on AB970 DR participants
- Utility marketing strategies differed
 - SDG&E chose later rollout for in-person contact; SCE focused reps on info & signups; PG&E focused reps more on info/feedback for '03

DR Program Familiarity (Non-Parts)

- Office, Retail/Grocery, Petroleum/Plastic/Rubber/Chemicals, and Electronics/Machinery/Fab Metals, least likely to be “Very Familiar”



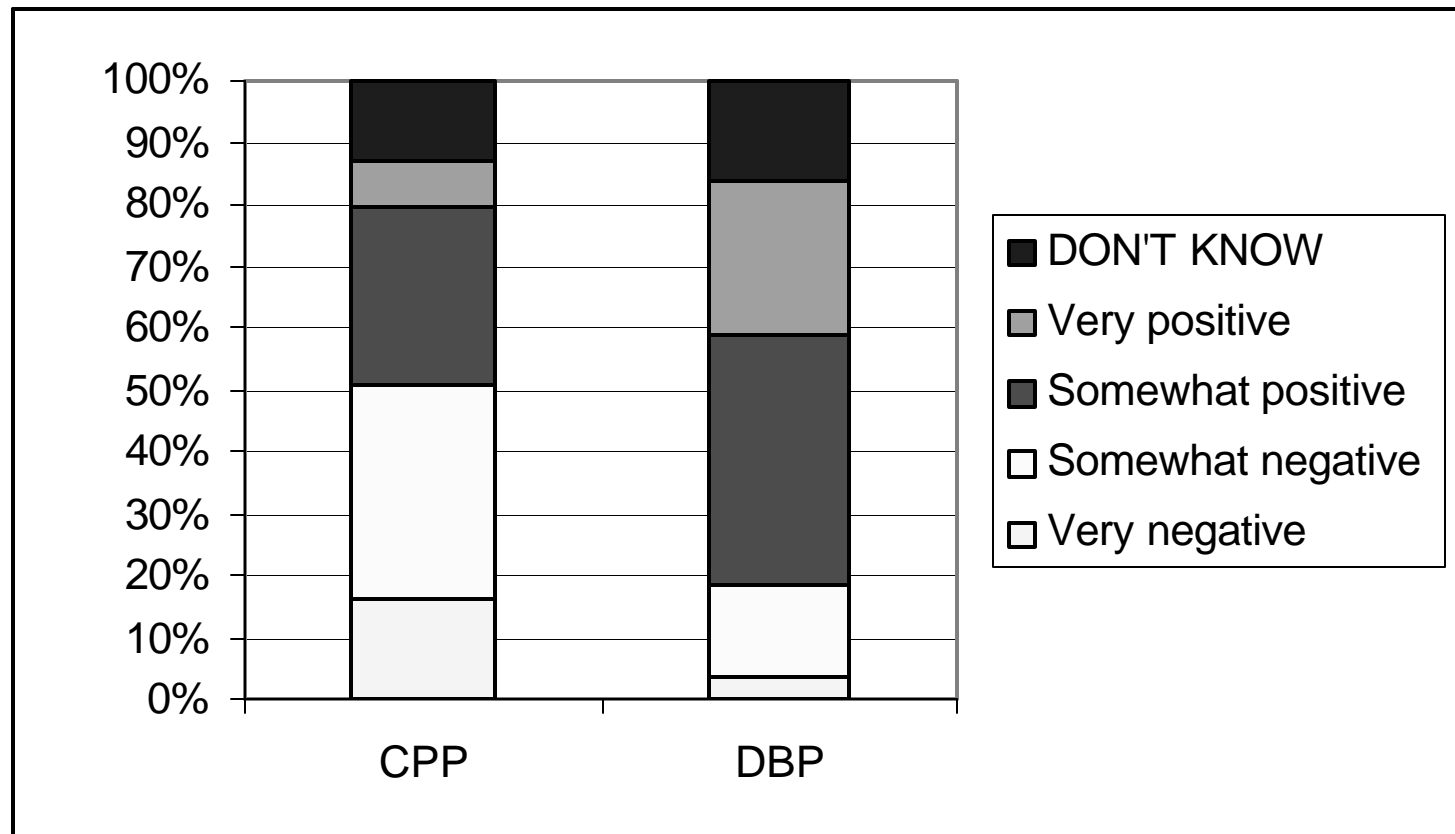
Participation to Date

3 IOUs	Participants	Participant Account MW Sum*	Participant Account GWh Sum	CPP Participants	DBP Participants
Size					
Very Small (100-200 kW) - SDG&E Only	3	1	2	2	3
Small (200-500 kW)	214	67	336	19	197
Medium (500-1000 kW)	151	106	414	27	124
Large (1000-2000 kW)	87	119	470	18	71
Extra Large (2000+ kW)	60	316	1,527	2	59
Business Type					
Commercial and TCU					
Office	36	27	100	1	35
Retail/Grocery	138	49	283	0	138
Institutional	35	82	363	11	25
Other Commercial	64	72	290	13	56
Transportation/Communication/Utility	45	34	95	19	26
Industrial and Agricultural					
Petroleum, Plastic, Rubber and Chemicals	52	87	389	3	49
Mining, Metals, Stone, Glass, Concrete					
Electronic, Machinery, Fabricated Metals					
Other Industrial and Agriculture	58	64	263	14	44
Unclassified					
Unknown	0	0	0	0	0
Total Accounts	515	608	2,749	68	454
Total Customers	321			45	280

*Diversified customer peak demand

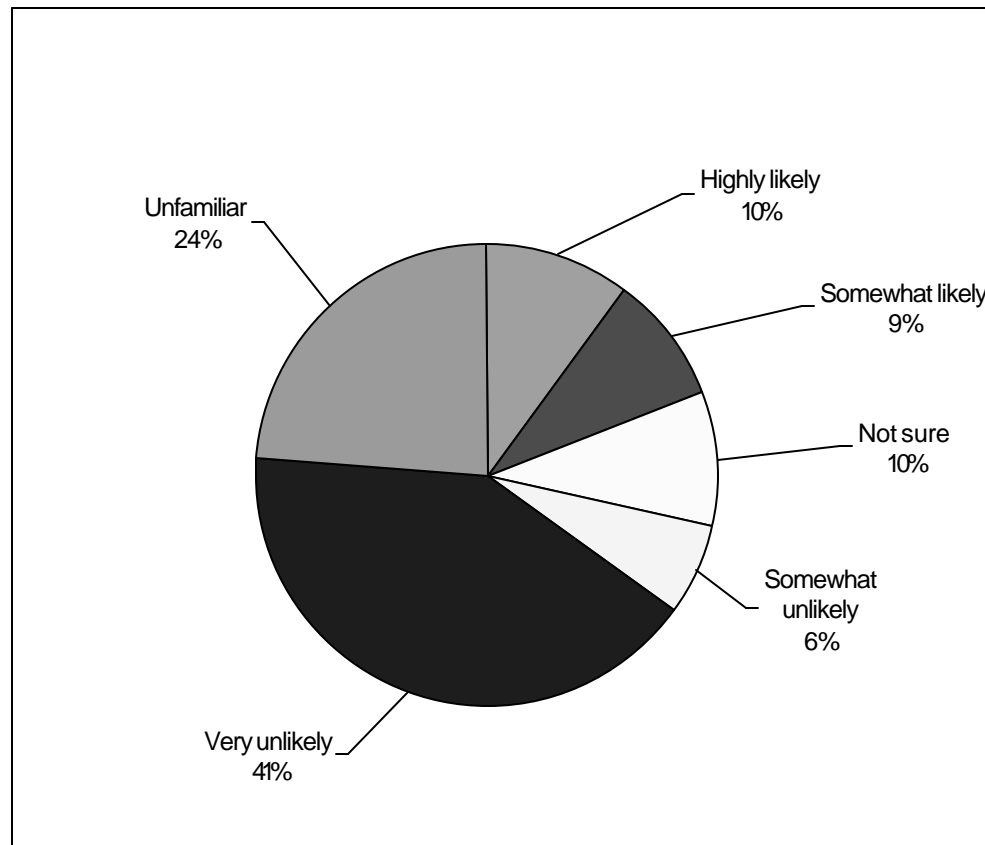
Non-Part CPP/DBP General Attitudes

- Perceptions of these “types” of programs:



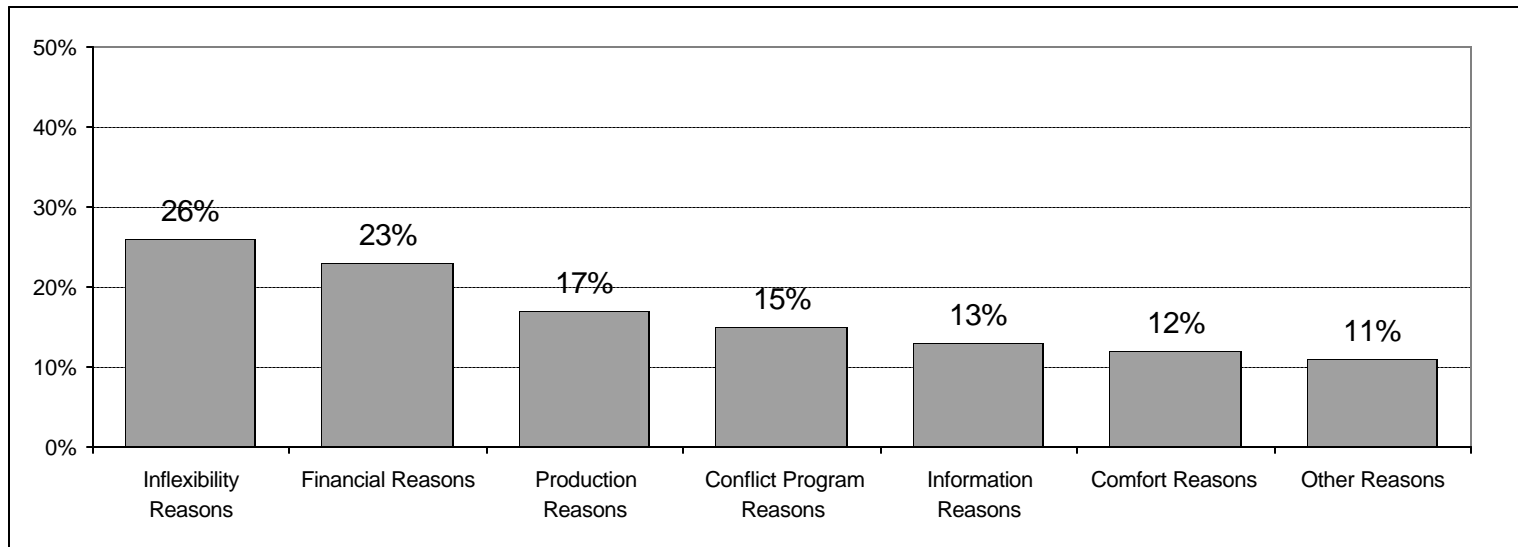
Non-Part Decision-making Status

- Most have decided not to participate or are unfamiliar, but self-reported “likely” are significantly larger than current parts:



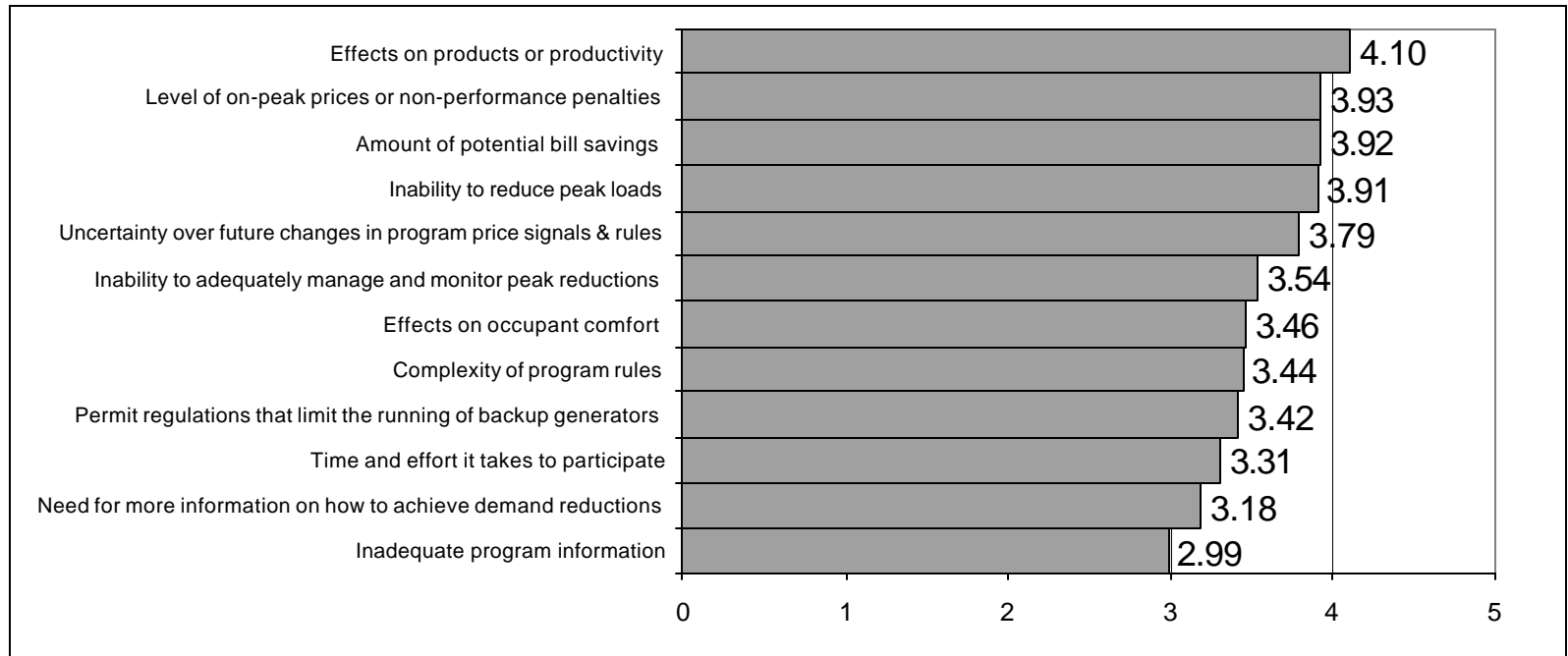
Reasons for Non-Participation

- Open ended answers:



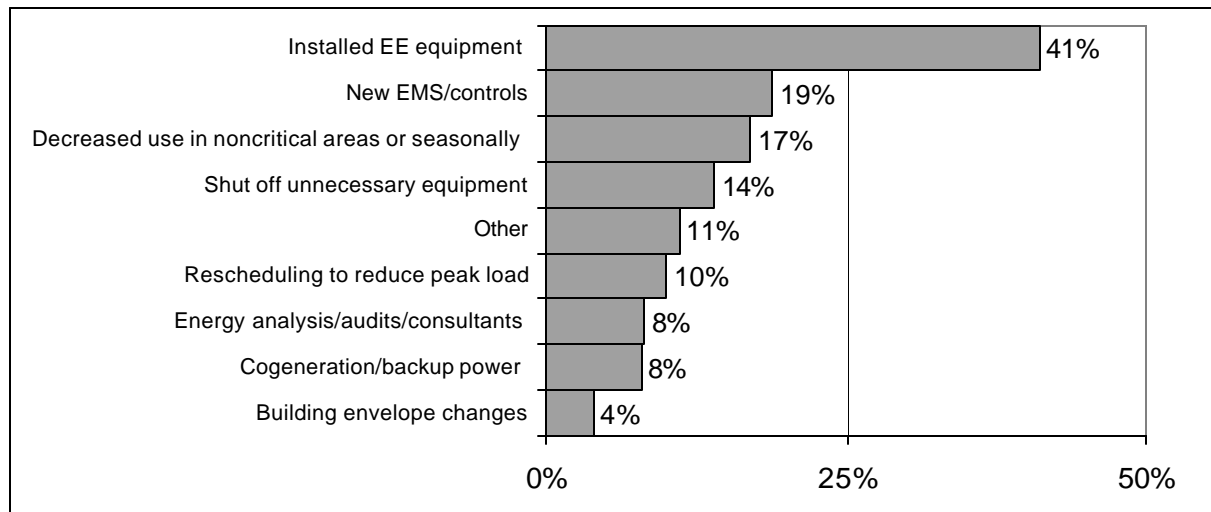
Barriers to Participation (Non-parts)

- Prompted ratings
 - Effects on products/productivity largest concern for industrial & Retail/Grocery, Comfort highest rated concern for Office & Institutional



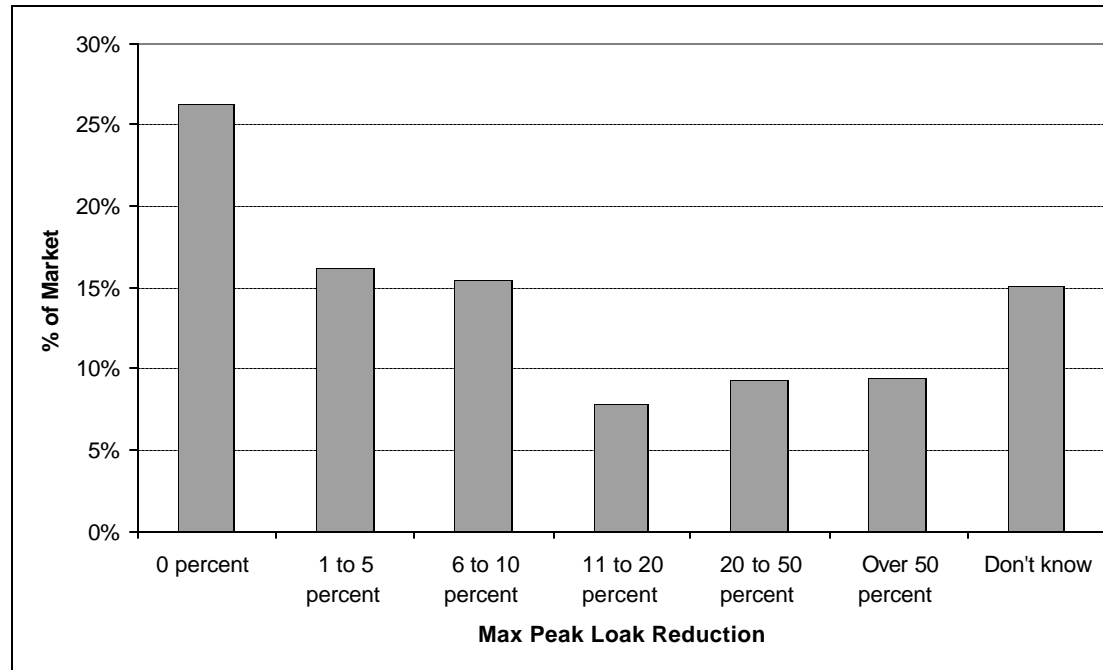
TOU and Past Actions (Non-parts)

- 67% of the market reports being on a TOU rate
- Roughly half of the market on TOU took actions to shift usage to off-peak due to price differences
 - Significant share of actions before and after energy crisis
- Ave reported peak load reduction was nearly 10%
- Actions to reduce on-peak usage:



DR Max Potential for WG2 Pop

- Ave. maximum peak load reduction ~16%
 - As expected varies widely by segment

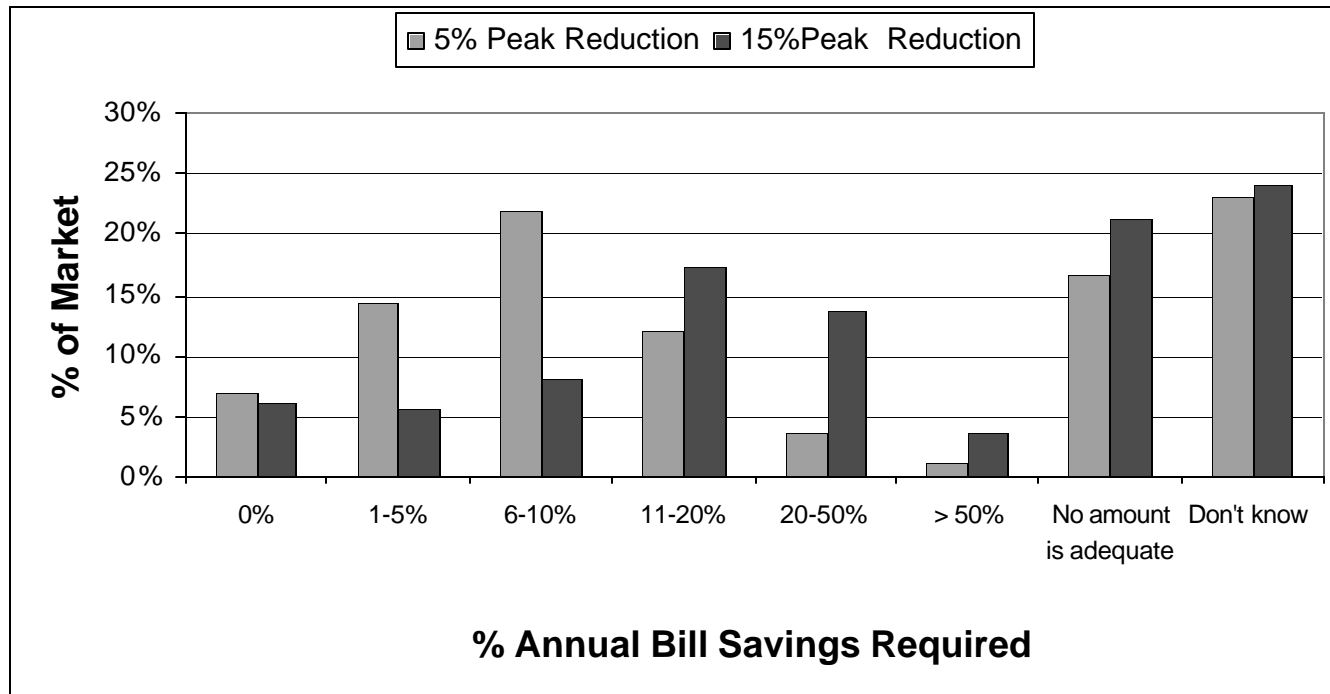


- May equate to ~1 to 1.5 GW of current potential (probably not incremental to current non-DA Interruptibles)

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Willingness to Play for Pay

- % annual bill savings required to reduce 5%/15%



- Using current program payment levels (1-2% of bill), preliminary calcs indicate a potential of ~50 to 100 MW

Recap of Customer Reaction to Date

- Limited participation, except SCE high DBP signups
 - Key motivations are bill savings, no load change required (CPP), low risk (DBP), enhance reliability
- Load reduction potential from signups is uncertain
 - Many parts indicate they do not intent to take actions
 - Default assumption is 15% (~90 MW), may be much less
- Most non-participants appear to have made a firm decision not to participate
 - However, significant number of non-parts say they are likely to participant in one of the programs
 - Max potential large, economic potential appears very modest
- Key reasons for non-participation include:
 - Inability to shift load, lack of financial motivation, concerns over eligibility, and lack of information

Overview of Phase I Result Themes

- Market is aware of CPP and DBP, but familiarity is shallow
- Assistance programs have little traction so far
- DBP signups higher for SCE; CPP very low across all utilities
- Much of initial market reaction is not to participate
- Programs are still fairly new - adoption takes time
- But...moderate-to-strong evidence that programs in current form, with current market conditions, may not make major contribution to achieving overall DR goals
- Market appears to need stronger motivation, knowledge, and capability
- Expect on-going learning to occur with these tariffs

Initial Views and Interpretations

1. Regarding adjusting rate offers in 2004:
 - Two views expressed --1) Need to let sales/adoption cycle play out versus 2) a desire to make needed changes now
 - Some PMs expressed the dilemma as: Giving current rates time to work or accepting the inevitable and make changes sooner rather than later
2. Many customer responses consistent with new product or service offering -- can't do it and/or don't need it:
 - Perceived inability to shift load is cited by customers most often as the reason for non-participation (this may change over time)
 - Secondary factors cited include lack of financial motivation and uncertainty/changes in programs over time
3. Benefits count -- particularly for account execs/ reps when marketing rates to customers:
 - Need to understand value to the commodity provider of customers' ability to shift load and develop win/win rates

Overall Recommendations

- Continue/expand research on potential modifications for 2005
- Continue marketing and support for current programs through Summer 2004
- Re-assess Transitional Incentives Programs and consider more immediate modifications
- Consider options for motivating customers to leave their current “comfort zone” on DR capability
 - Which market actors, what resources are available?
 - Participation in PIER DR automated DR research?
 - Dissemination of case studies, results and tools?

Next Steps for Evaluation Research

- Impact evaluation to be conducted for Summer 2004
- On-site data and monitoring to better understand DR impacts, potential, constraints
- Additional process evaluation to assess implementation and participation experiences
- Customer in-depth research to further assess program/tariff preferences